abcam

Product datasheet

Formaldehyde Assay Kit (Fluorometric) ab196997

2 References   2 Images

Overview

Product name	Formaldehyde Assay Kit (Fluorometric)
Detection method	Fluorescent
Sample type	Saliva, Urine, Serum, Plasma, Other biological fluids, Tissue, Adherent cells, Suspension cells
Assay type	Quantitative
Sensitivity	> 2 µM
Assay time	1h 00m
Species reactivity	**Reacts with:** Mammals, Other species

Product overview

Formaldehyde Assay Kit (Fluorometric) (ab196997) provides a simple, sensitive and high-throughput adaptable assay that detects biologically relevant concentrations of formaldehyde (HCHO) in various fluids and tissues. The assay relies on the oxidation of formaldehyde to produce a stable fluorescent signal, which is directly proportional to the amount of formaldehyde found in samples.

The kit can detect less than 2 µM of formaldehyde in a variety of samples.

Notes

This product is manufactured by BioVision, an Abcam company and was previously called K805 PicoProbe™ Formaldehyde Fluorometric Assay Kit. K805-100 is the same size as the 100 test size of ab196997.

Formaldehyde (HCHO) is the simplest aldehyde and one of the most often used organic compounds in industrial processes due to its high reactivity with a variety of chemicals. Endogenous formaldehyde can be produced in organisms via metabolic processes while exogenous formaldehyde can be absorbed after oral, dermal or inhalation exposure. formaldehyde is highly toxic due to its capacity to covalently bind to macromolecules, such as DNA, and is well known for its neurotoxicological effects. Exposure to relatively high levels of formaldehyde is believed to cause leukemia, nose and nasopharyngeal cancer, etc.; however the epidemiological evidence is unclear. It can also affect memory and learning capacity.
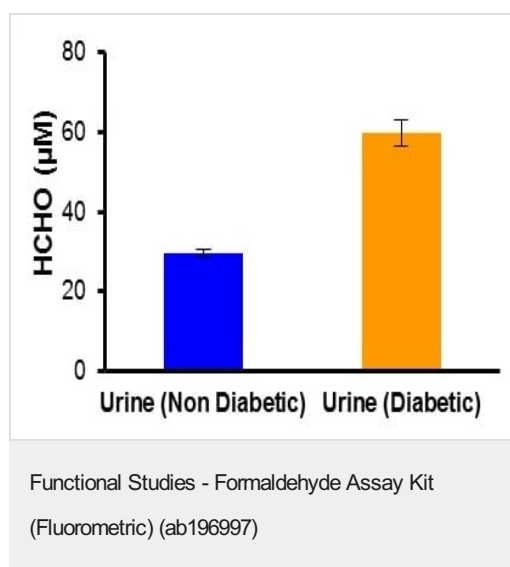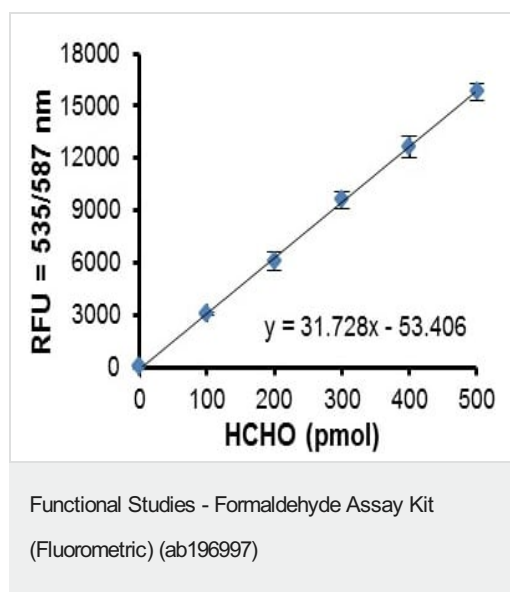
Platform

Microplate reader

Properties

Storage instructions	Store at -20°C. Please refer to protocols.

Components	100 tests
Developer Mix II	1 vial
Formaldehyde Enzyme Mix	1 vial
Formaldehyde Standard	1 x 100µl
HCHO Assay Buffer	1 x 25ml
PicoProbe I	1 x 0.4ml

Images

Typical Formaldehyde (HCHO) standard calibration curve using fluorometric reading.

Functional Studies - Formaldehyde Assay Kit (Fluorometric) (ab196997)

Measurement of Formaldehyde (HCHO) concentration in human urine from non-diabetic and diabetic donors. Samples were deproteinized using 10 kD Spin Column (**ab93349**) and diluted 10X. Diluted samples (20 µL) were spiked with known amount of Formaldehyde (300 pmol). Sample preparation and assay was performed following kit protocol.

Functional Studies - Formaldehyde Assay Kit (Fluorometric) (ab196997)

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